IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	Terry Keith Bryant
Serial No.	:	10/767,396
Filed	:	03/26/2004
For	:	METHOD OF IMPROVING MEDICAL APPARATUS IN ORDER TO REDUCE OR REPLACE ANCILLARY MEDICAL ASSISTANCE BY EMPLOYING AUDIBLE VERBAL HUMAN SOUNDING VOICES WHICH PROVIDE THERAPEUTIC INSTRUCTIONS AND ENCOURAGE USAGE AND GIVE MEASUREMENTS AS NEEDED EMANATING FROM THE APPARATUS'S BY USING ELECTRONIC TECHNOLOGY
Examiner	:	Michael C. Astorino
Art Unit	:	3736
Our File No.	:	1023.8009

CERTIFICATION OF E-MAILING

I hereby certify that this correspondence, and any attachments thereto, is being filed via electronic mail with the Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313.1450 on the date indicated below.

Daniel S Polley	/Daniel S Polley/	February 19, 2008
Name of Person Mailing Paper	Signature	Date

AMENDMENT AND STATEMENT OF THE SUBSTANCE OF THE INTERVIEW

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Supplementing Applicant's response to the Office Action dated July 13, 2007, please amend the application as follows:

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks/Arguments begin on page 13 of this paper.

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1 and 2 (cancelled).

Claim 3 (currently amended) A system for replacing live human ancillary medical assistance in order to prompt, encourage and guide a user in relationship to utilization of medical apparatuses, said system comprising:

a medical apparatus selected from a group of medical apparatuses consisting of (1) heart rate monitoring apparatuses, (2) patient monitoring apparatuses, (3) measuring and patient performance measurement apparatuses, (4) patient therapeutic critical levels measuring apparatuses, (5) medical apparatuses having adjustable patient performance targets, (6) patient's medical performance volume measuring apparatuses, (7) medical apparatuses that provide points or ratios of a patient's performance, (8) medical verification apparatuses that confirm or refute a conclusion regarding a patient's health or performance, (9) medical apparatuses that are pre-programmed, (10) medical apparatuses that provide pronunciation of exactness towards a goal for a patient, (11) medical apparatuses that utilize an LCD display, (12) medical diagnostic apparatuses, (13) medical timing apparatuses for monitoring performance of medically related functions, (14) medical apparatuses that require timing or a timing mechanism, (15) medical heart monitoring apparatuses, (16) medical respiratory apparatuses, (17) medical apparatuses that require timed interval use, (18) oxygen tanks for medical purposes, (19) ventilators for medical purposes, (20) pulse monitoring medical apparatuses, (21) medical critical parameter measuring apparatuses, and (22) medical monitoring apparatuses ~~used for a particular medical or therapeutic function where live human ancillary medical assistance is normally physically present with the user in order to verbally prompt, encourage, give measurements or guide a user~~

~~in connection with utilization of said medical apparatus and in correlation with any medical procedure working in synthesis with said medical apparatus~~;

a self-contained electronic assembly comprising a single microcontroller unit controlled by a functional program and an audio storage unit, said audio storage unit storing digital data representing at least one audible verbal message for prompting and initiating use or providing understanding for the user when utilizing the medical apparatus and at least one audible verbal message for guiding the user's use of said medical apparatus; wherein the functional program instructs the single microcontroller unit regarding the operation of said electronic assembly and when to automatically generate prompting, encouraging and guiding verbal audible messages for the user concerning said medical apparatus; said electronic assembly eliminating the need for live human ancillary medical assistance to be present with the user to provide said verbal audible messages when the user is utilizing said medical apparatus;

means for powering said electronic assembly; and

a speaker in communication with said electronic assembly, wherein upon direction from said microcontroller said speaker receiving a data signal from said electronic assembly representing an audible verbal message stored in said audio storage unit so that said audible verbal message is automatically generated and transmitted directly to the user to encourage compliance with the usage guidelines for said medical apparatus by the user without the necessity of having a live human ancillary medical assistant physically present with the user to provide said audible verbal message to initiate use or to instruct or encourage the user.

Claim 4 (previously presented) The system of claim 3 wherein said self-contained electronic assembly further including means for verbally indicating to the user a measurement or result achieved by the user from the performance of the required or recommended therapeutic procedure with said medical apparatus; wherein the measurement or result achieved is calculated through mathematical and logic calculations performed by said single microcontroller unit based on instructions received from the functional program.

Claim 5 (previously presented) The system of claim 4 wherein said means for verbally

indicating having means for converting digital audio data into continuous analog signal.

Claim 6 (previously presented) The system of claim 4 wherein said means for verbally indicating comprising:

means for receiving analog signals relating to the user's performance with the medical apparatus;

a level setting unit providing a performance level or goal for said medical apparatus; and

means for converting the receiving analog signals from said medical apparatus into digital data;

wherein an encouragement message sent from audio storage unit to the speaker by direction of the single microcontroller is based on the analog signal received from said medical apparatus as compared to the performance level or goal provided by the level setting unit.

Claim 7 (previously presented) The system of claim 6 wherein said means for receiving is a gauge provided on said medical apparatus and a gauge connector in communication with the gauge and a signal input unit of said single microcontroller unit.

Claim 8 (previously presented) The system of claim 7 wherein said level setting unit in communication with said signal input unit.

Claim 9 (previously presented) The system of claim 3 wherein said audio storage unit having a first verbal message providing a verbal prompting message to initiate use of the medical apparatus; wherein said single microcontroller unit directs the audio storage unit to send the ~~a~~ first verbal message to the speaker in order to prompt the user to initiate use of said medical apparatus device.

Claim 10 (previously presented) The system of claim 9 wherein said self-contained electronic assembly having a timing device for determining when to automatically send said at least one stored verbal message from said audio storage unit to said speaker in order to prompt the user to initiate use of said medical apparatus as needed in relationship to said medical function of said medical apparatus.

Claim 11 (previously presented) The system of claim 10 wherein said single

microcontroller unit is programmed to direct the audio storage unit of output signals at a set time to send the first verbal message from the audio storage unit to the speaker in order to prompt the user to initiate use of said medical apparatus from the audio response relayed from a Signal Output Unit of the electronic assembly at a rate appropriate for the regeneration of an audible response from the audio data.

Claim 12 (previously presented) The system of claim 9 wherein said single microcontroller unit continues to direct the audio storage unit to send the first verbal message or another verbal message stored in the audio storage unit to the speaker on a spaced apart continuous basis until said single microcontroller unit learns that the user has initiated performance of the required procedure with said medical apparatus.

Claim 13 (previously presented) The system of claim 9 wherein after the required procedure has been performed by the user said single microcontroller unit is programmed to wait for a predetermined therapeutic time period before automatically directing said audio storage unit to send a next initial verbal prompting message to the user for prompting the user to initiate another required procedure; wherein the user is automatically prompted and encouraged to perform multiple required procedures with said medical apparatus device being employed during a single day period as therapeutically required or recommended for said medical apparatus.

Claim 14 (previously presented) The system of claim 3 wherein said self-contained electronic assembly further comprising means for verbally indicating comprising:

means for determining a measurement or result achieved by the user from performing the required procedure with said medical apparatus as needed; and

one or more verbal encouragement messages stored within said audio storage unit;

wherein a signal corresponding to the measurement or result achieved by the user is sent by said means for determining to the audio storage unit which provides an appropriate verbal encouraging or guiding message which is sent to the speaker to verbally indicate to the user the measurement or result determined and the encouraging or guiding message.

Claim 15 (previously presented) The system of claim 14 wherein said self-contained

electronic assembly further comprising a timer for dictating when audio messages are sent to the speaker by said audio response unit based on instructions contained within the functional program.

Claim 16 (previously presented) The system of claim 15 further comprising a level setting unit storing a target measurement; wherein the verbal encouraging or guiding message sent is chosen from a plurality of verbal messages stored in said audio data message storage unit; wherein at least one of the plurality of verbal encouraging or guiding messages is used where the measurement or result determined is lower than the target measurement and at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is higher than the target measurement; wherein the plurality of verbal messages allow an appropriate verbal message to be selected, according to the user's measurement or result performance of the required procedure according to said medical apparatus.

Claim 17 (currently amended) A system for replacing live human ancillary medical assistance in order to prompt, encourage and guide a user with the use of a medical apparatus, said system comprising:

a medical apparatus selected from a group of medical apparatuses consisting of (1) heart rate monitoring apparatuses, (2) patient monitoring apparatuses, (3) measuring and patient performance measurement apparatuses, (4) patient therapeutic critical levels measuring apparatuses, (5) medical apparatuses having adjustable patient performance targets, (6) patient's medical performance volume measuring apparatuses, (7) medical apparatuses that provide points or ratios of a patient's performance, (8) medical verification apparatuses that confirm or refute a conclusion regarding a patient's health or performance, (9) medical apparatuses that are pre-programmed, (10) medical apparatuses that provide pronunciation of exactness towards a goal for a patient, (11) medical apparatuses that utilize an LCD display, (12) medical diagnostic apparatuses, (13) medical timing apparatuses for monitoring performance of medically related functions, (14) medical apparatuses that require timing or a timing mechanism, (15) medical heart monitoring apparatuses, (16) medical respiratory apparatuses, (17) medical apparatuses that

require timed interval use, (18) oxygen tanks for medical purposes, (19) ventilators for medical purposes, (20) pulse monitoring medical apparatuses, (21) medical critical parameter measuring apparatuses, and (22) medical monitoring apparatuses ~~having a particular medical or therapeutic function where live human ancillary medical assistance is normally physically present with the user in order to verbally to prompt, encourage and guide a user in connection with the use of said medical apparatus or in correlation with any medical procedure working in synthesis with said medical apparatus~~;

a self-contained means for automatically verbally prompting the user to initiate use of said medical apparatus to perform a medical procedure achieved through the use of said medical apparatus without a live human ancillary medical assistant physically instructing or encouraging the user;

means for automatically verbally indicating and verbally responding accordingly to the user based on a measurement or result achieved by the user from the user's performance of the required procedure associated with the medical apparatus, said means for verbally indicating and verbally responding disposed within the housing as said means for verbally prompting; and

a housing connected to the medical apparatus;

wherein said means for automatically verbally prompting and said means for automatically verbally indicating and verbally responding are both disposed within a said housing.

Claim 18 (cancelled)

Claim 19 (previously presented) The system of claim 17 wherein said means for automatically verbally indicating comprising:

means for determining a measurement or result achieved by the user from performing the required procedure with said medical apparatus;

means for establishing a target measurement or result for said medical apparatus;

an audio response unit;

means for converting digital data into analog through regeneration;

a signal output unit in communication with said means for converting;

wherein audio data is successively relayed to the Signal Output unit at a rate appropriate for the regeneration of the audible response according to said medical apparatus;

means for powering said audio response unit; and

a speaker in communication with said signal output unit;

wherein an output signal corresponding to the measurement or result achieved by the user is sent by said means for determining to the audio response unit which provides a verbal message relayed from stored audio data which is sent to the speaker to verbally indicate to the user said measurement or result achieved and also sends a verbal encouragement message appropriate for the measurement or result determined based on the target measurement or result provided by said means for establishing.

Claim 20 (previously presented) The system of claim 19 wherein said audio response unit including an audio message storage unit which sends ~~a~~ the verbal encouragement message to the speaker based on a comparison of the measurement or result achieved to the target measurement or result.

Claim 21 (previously presented) The system of claim 19 wherein the verbal encouragement message sent is chosen from a plurality of verbal messages stored in the audio message storage unit; wherein at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is lower than the target measurement or result and at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is higher than the target measurement or result; wherein the plurality of verbal messages allow an appropriate verbal message to be selected according to the user's measurement or result performance of the required procedure according to said medical apparatus as needed.

Claim 22 (currently amended) An automated verbal prompting and indication device for a medical apparatus, said medical apparatus <u>selected from a group of medical apparatuses consisting of (1) heart rate monitoring apparatuses, (2) patient monitoring apparatuses, (3)</u>

measuring and patient performance measurement apparatuses, (4) patient therapeutic critical levels measuring apparatuses, (5) medical apparatuses having adjustable patient performance targets, (6) patient's medical performance volume measuring apparatuses, (7) medical apparatuses that provide points or ratios of a patient's performance, (8) medical verification apparatuses that confirm or refute a conclusion regarding a patient's health or performance, (9) medical apparatuses that are pre-programmed, (10) medical apparatuses that provide pronunciation of exactness towards a goal for a patient, (11) medical apparatuses that utilize an LCD display, (12) medical diagnostic apparatuses, (13) medical timing apparatuses for monitoring performance of medically related functions, (14) medical apparatuses that require timing or a timing mechanism, (15) medical heart monitoring apparatuses, (16) medical respiratory apparatuses, (17) medical apparatuses that require timed interval use, (18) oxygen tanks for medical purposes, (19) ventilators for medical purposes, (20) pulse monitoring medical apparatuses, (21) medical critical parameter measuring apparatuses, and (22) medical monitoring apparatuses ~~of a type where live human ancillary medical assistance is normally present with a user to ensure use is initiated by the user in order to prompt encourage give measurements or guide use of said medical apparatus~~, said automated prompting device comprising:

a housing connected to the medical apparatus;

electronic means for automatically verbally prompting a user to initiate use for said medical apparatus to perform or guide a recommended procedure achieved through utilization of said medical apparatus, without having to have a live human ancillary medical assistant physically present; wherein said verbal prompting is achieved without instructions, encouragement or information about the medical apparatus from a live human ancillary medical assistant or from a remote location; and

electronic means for automatically verbally indicating a response according to utilization of said medical apparatus based on a measurement or result being achieved by the user from the user's performance of the procedure using said medical apparatus and without encouragement or instructions from a live human ancillary medical assistant or from a remote location;

wherein said electronic means for automatically verbally prompting and said electronic means for automatically verbally indicating are both disposed within said housing.

Claim 23 (previously presented) The automated verbal prompting and indication device of claim 22 wherein said electronic means for automatically verbally prompting is part of a self-contained electronic assembly in communication with a speaker and means for powering said electronic assembly, said electronic assembly comprising a single microcontroller unit and an audio storage unit, said audio storage unit having at least one stored verbal message for prompting the user to initiate use of said medical apparatus to perform the required procedure; wherein said single microcontroller unit automatically directs the audio storage unit to send a first verbal message to the speaker in order to prompt the user to initiate use of said medical apparatus by the user, said electronic assembly disposed within said housing.

Claim 24 (previously presented) The automated verbal prompting and indication device of claim 23 wherein after the required procedure has been performed by the user said microcontroller unit is programmed to wait for a predetermined time period before directing said audio storage unit to send a next verbal prompting message to the user for prompting the user to initiate another required procedure; wherein the user is automatically encouraged by said electronic assembly communicating through the speaker to perform multiple required procedures with said medical apparatus during a single day period without having a live human ancillary medical assistant present or without having to receive a communication from a remote location.

Claim 25 (previously presented) The automated verbal prompting and indication device of claim 22 wherein said means for verbally indicating comprising:

means for determining a measurement or result achieved by the user from performing the required procedure with said medical apparatus;

an audio response unit;

means for powering said audio response unit; and

a speaker in communication with said audio response unit;

wherein a signal corresponding to the measurement or result achieved by the user is sent

by said means for determining to the audio response unit which generates a verbal message which is sent to the speaker to verbally indicate to the user said measurement or result achieved and also sends a verbal functional message appropriate for the measurement or result determined in accordance with particular guidelines for said medical apparatus;

wherein said means for determining, said audio response unit, said means for powering and said speaker are disposed within said housing.

Claim 26 (previously presented) The automated verbal prompting and indication device of claim 25 further comprising a level setting unit for providing a target measurement or result from use of the medical apparatus; wherein said audio response unit including an audio message storage unit which sends a verbal encouragement message to the speaker based on a comparison of the measurement or result achieved to the target measurement or result provided by said level setting unit; said level setting unit disposed within said housing.

Claim 27 (previously presented) The automated verbal prompting and indication device of claim 26 wherein the verbal encouragement message sent is chosen from a plurality of verbal messages stored in the audio message storage unit; wherein at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is lower than the target measurement or result and at least one of the plurality of verbal encouragement messages is used where the measurement or result determined is higher than the target measurement or result; wherein the plurality of verbal messages allow an appropriate verbal message to be selected according to the user's measurement or result from performance of the required procedure according to said medical apparatus.

Claim 28 (previously presented) The automated verbal prompting and indication device of claim 22 further comprising means for storing information relating to the user usage of said medical apparatus or to measurements or results achieved by the user from use of said medical apparatus as needed.

Claim 29 (cancelled).

Claim 30 (previously presented) The automated verbal prompting and indication device

of claim 28 further comprising means for transmitting the stored information to a retrieving location that is remote to whatever current location of said medical apparatus.

Claim 31 (cancelled).

Claim 32 (previously presented) The system of claim 3 wherein said medical apparatus contained within a first housing and said self-contained electronic assembly contained within a separate second housing.

Claim 33 (previously presented) The system of claim 3 wherein said medical apparatus and said self-contained electronic assembly contained within a single housing.

Claim 34 (previously presented) The system of claim 17 wherein said medical apparatus contained within a second housing which is separate from the housing for said means for automatically verbally prompting.

Claim 35 (previously presented) The system of claim 17 wherein said housing containing said means for automatically verbally prompting also containing said medical apparatus.

Claim 36 (previously presented) The automated verbal prompting and indication device of claim 22 further comprising a housing containing both said means for automatically verbally prompting and said means for verbally indicating and verbally responding.

Claim 37 (cancelled)

REMARKS

This Amendment supplements Applicant's previous Amendment filed in response to the Office Action having a mailing date of April 3, 2007.

Claims 3, 17 and 22 have been amended. Claim 37 has been cancelled. No new matter has been inserted. Claims 3-17, 19-28 and 30 and 32-36 remain pending in the application. Applicant respectfully requests reconsideration of the Examiner's rejections.

Applicant incorporates by reference the extensive comments regarding Edwards and Wessel from its previous Amendments in their entireties. Many of the physical differences, as well as fundamental differences in operation and function, between Applicant's invention and the devices in Edwards and Wessel were noted in Applicant's previous response.

In addition, Applicant notes the following non-limiting differences in Applicant's independent claims that are not disclosed or presented in Edwards or Wessel.

Edwards:

Edwards' audible/verbal instructions are for the limited purpose of using the Edwards spirometer.

Edwards fails to teach of any prompting messages for initiating use or for programming any set periods for initiating prompting messages. Edwards also fails to teach of verbal messages relating to measurements performed from use of the medical apparatus and for providing verbal encouragement messages based on such measurement readings.

Applicant's invention initiates, prompts and encourages timely use of the medical apparatus through automatically generated verbal messages without the presence of ancillary medical assistance to perform any normal ancillary task. Edwards fails to teach these claimed features.

As mentioned above, Edwards does not prompt a user to initiate use or begin using the spirometer. The claims state to "prompt the user to initiate use of said medical apparatus". This claim language shows that Applicant's claimed invention on its own, automatically begins

prompting the user to use the medical apparatus as needed (i.e. programmed timed intervals). Edwards only provides certain verbal instructions on how to use the medical apparatus after the user or other individual, on his or her own, has activated, calibrated or recalibrated the medical apparatus. Edwards does not prompt the user to activate or initiate use of the medical apparatus.

Accordingly, Applicant respectfully submits that Edwards fails to disclose Applicant's claimed invention.

The Wessel claim rejections.

Wessel only teaches providing rewards through a visual display, without any predetermined voice guidance taught being part of the Wessel device itself.

Wessel's device does not provide self-contained verbal instructions, as claimed by Applicant, for prompting the user to initiate use of the device and for guiding the user during the use of the device.

All of the above noted deficiencies of Edwards also apply to Wessel.

Wessel does not disclose providing audible verbal instructions or prompts, as claimed by Applicant. Wessel is actually silent regarding the device providing audible verbal instructions or prompts. No verbal communication is provided by Wessel. Wessel only displays visual text messages.

Wessel does not provide audible verbal instructions to prompt, initiate, guide and encourage use of a medical apparatus, such as a human voice contained within the apparatus as claimed by Applicant. Wessel is limited to visual displays.

Wessel's device fails to fall under any of the medical apparatus categories listed in Applicant's independent claims.

Wessel also fail to verbally indicate any readings, results or measurements obtained through use of the Wessel device. Rather, the readings, results and/or measurements are only visually displayed.

Wessel also does not have an audio storage or audio response unit where audible verbal messages are stored. Wessel provides no audible, verbal instructions, guidance, prompting, encouragement or teachings to a user for using the Wessel device.

Additionally, as the Wessel messages can be sent from a remote location, the Wessel device itself does not decide which message to select from a plurality of stored messages and is not a self contained unit, as claimed by Applicant.

Applicant's claimed invention significantly differs from Wessel as it provides a novel method and system incorporating a self-contained electronic assembly component to replace ancillary medical assistance normally associated with the medical apparatus.

In certain claims, Applicant's claimed invention claims a gauge for determining measurements and triggers audible verbal messages to the user based on the user's performance measurements. Wessel, as well as Edwards, fails to teach or disclose these claimed features. Accordingly, the claims discussing a gauge are also not shown by Wessel.

The Wessel patent also does not on its own automatically begin prompting the user to initiate use of the medical apparatus. Applicant's claimed electronic assembly uses a single microcontroller unit to perform all functions. To the contrary, Wessel requires a first processor 95 for processing information regarding the glucose readings and a second processor 130 for controlling the visual reward to provide the user.

Wessel also teaches away from replacing ancillary medical assistance, as it describes a live human (doctor, nurse) receiving the glucose score at a remote location and then remotely sending a message based on such score. Col. 4, lines 8-34; Col. 14, lines 15-22.

Applicant's electronic assembly, which includes the audio response unit, is claimed as being self-contained. Applicant's verbal messages are stored and produced from the electronic assembly without any further remote signal or transmissions. Wessel fails to disclose this claimed feature.

Accordingly, Applicant respectfully traverses all rejections based on Wessel and/or Edwards and respectfully requests that such rejections be withdrawn.

In response to the Interview Summary, Applicant respectfully incorporates by reference the Examiner's comments expressed in the Interview Summary, which accurately describes the subject matter of what was discussed during the Telephone Interview.

In view of the above, Applicant respectfully requests that the Examiner withdraw all objections and rejections. Favorable action is respectfully requested.

If there are any additional charges, including extension of time, please bill our Deposit Account No. 503180.

Respectfully submitted,

/Daniel S Polley/

Daniel S. Polley, Reg. No. 34,902

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